

AMENDMENTS TO THE DRAWINGS

Please amend the drawings as follows. Please replace the four drawing sheets containing FIGS. 1A-1D, FIGS. 2A-2D, FIGS. 3A-3D and FIGS. 4A-4B, respectively, with the four replacement drawing sheets attached hereto.

Also, please add the new drawing sheet containing new FIG. 7, attached hereto.

REMARKS

Prior to entry of this amendment, claims 1-17, 19, 24, 28-45, 50, 51 and 53-67 are pending in the instant application. Claims 2, 7, 9, 11, 16, 28-45, 50, 51 and 61-67 are withdrawn. In particular, claims 2, 7, 9, 11, 30, 35, 37 and 50 were withdrawn by preliminary amendment, and claims 16, 28-45, 50, 51 and 61-67 have been withdrawn by the Examiner. Claims 18, 20-23, 25-27, 46-49 and 52 are canceled. Claims 1 and 28 are independent.

Applicants appreciate the Examiner's indication that the Information Disclosure Statements filed on June 7, 2004, and October 22, 2004, have been considered.

Applicants respectfully request that, in the next Office action, the Examiner acknowledge applicants' claim for foreign priority and receipt of the certified copy of the priority document, which was filed on July 23, 2003.

Claims 1, 3-6, 8, 10, 12-15, 17, 19, 24 and 53-60 are presented to the Examiner for further prosecution on the merits.

A. Introduction

In the outstanding Office action, the Examiner objected to the drawings; objected to the specification; objected to claims 19 and 53; rejected claims 8 and 24 under 35 U.S.C. § 112, second paragraph; rejected claims 1, 4, 6, 8, 10 and 53-59 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,408,204 to Hirschman (hereinafter "the Hirschman reference"); rejected claims 1 and 60 under 35 U.S.C. § 102(b) as being anticipated by WO 00/19894 to Skladnev et al. (hereinafter "the Skladnev et al. reference"); rejected claims 1 and 15 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 3,957,037 to Fletcher et al. (hereinafter "the Fletcher et al. reference"); rejected claims 1 and 24 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,372,141 to Gallup et al.

(hereinafter “the Gallup et al. reference”); rejected claims 1, 3-6, 8, 10 and 53-59 under 35 U.S.C. § 103(a) as being unpatentable over the Hirschman reference in view of U.S. Patent No. 5,114,424 to Hagen et al. (hereinafter “the Hagen et al. reference”); rejected claims 1 and 17 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 4,895,163 to Libke et al. (hereinafter “the Libke et al. reference”) in view of U.S. Patent No. 4,917,093 to Dufresne et al. (hereinafter “the Dufresne et al. reference”); rejected claims 1, 19 and 60 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 4,578,635 to Mee et al. (hereinafter “the Mee et al. reference”) in view of the Skladnev et al. reference; and indicated that claims 12-14 recite allowable subject matter, but objected to claims 12-14 as being dependent upon a rejected base claim.

B. Objections to the Drawings

In the outstanding Office action, the Examiner objected to Figures 1C, 1D, 2C, 2D, 3C, 3D and 4B, asserting they are photographs that are not of sufficient quality to show the details of the invention. By the instant amendment, applicants have amended the drawings by replacing drawing sheets for each of the four sheets containing FIGS. 1C, 1D, 2C, 2D, 3C, 3D and 4B, respectively. Applicants respectfully submit that FIGS. 1C, 1D, 2C, 2D, 3C, 3D and 4B, as illustrated in the replacement sheets, are of sufficient quality, and respectfully request entry and approval of these replacement drawing sheets.

The Examiner also objected to the drawings under 37 C.F.R. 1.83(a), asserting that the perpendicular distance adjusters set forth in claim 13 must be shown or the feature(s) canceled from the claims(s). Applicants respectfully submit that the distance adjuster set forth in claim 13 was not included in the original drawings because it may be substantially similar to

that illustrated in FIGS. 4A and 4B, simply used for the measurement electrodes rather than the current supply electrodes recited in claim 12.

Although applicants do not believe that additional illustrations are necessary, as noted directly above, by the instant amendment, applicants have amended the drawings to add a new drawing sheet illustrating FIG. 7. No new matter is added, and support for the subject matter illustrated in FIG. 7 can be found in claim 13 as originally filed, as well as in, e.g., paragraphs [0019] and [0045] of the specification as originally filed. The distance adjuster illustrated in FIG. 7 is disposed perpendicular to the distance adjuster illustrated in FIG. 4. Applicants respectfully request entry and approval of this new drawing sheet.

Additionally, applicants note that, by the instant amendment, the specification has been amended to make reference to new FIG. 7. No new matter has been added. Support for the amendments to the specification regarding FIG. 7 may be found in, e.g., claims 12 and 13 of the application as originally filed.

C. Objections to the Specification

In the outstanding Office action, the Examiner objected to the specification because of informalities in paragraphs 14-17, 19, 26 and 29. By the instant amendment, the specification is amended as set forth above. Applicants respectfully submit that these amendments to the specification overcome the objections thereto, and respectfully request that the objections to the specification be withdrawn.

D. Objections to Claims 19 and 53

In the outstanding Office action, the Examiner objected to claims 19 and 53. By the instant amendment, claims 19 and 53 are amended as set forth above. Applicants respectfully

submit that these amendments to claims 19 and 53 overcome the objections thereto, and respectfully request that these objections be withdrawn.

E. Rejection of Claims 8 and 24 under 35 U.S.C. § 112, Second Paragraph

In the outstanding Office action, the Examiner rejected claims 8 and 24 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to point out and distinctly claim the subject matter which applicant regards as the invention.

With respect to claim 8, the Examiner asserted that claim 8 lacks antecedent basis for the recitation of “the third and fourth electrodes.” Claim 8 is amended by the instant amendment to reflect the language of claim 8 as originally filed. In particular, applicants note that the language of claim 8 was inadvertently modified by the *Response to Restriction, Election and Preliminary Amendment*, filed September 28, 2005. Applicants regret this error.

With respect to claim 24, the Examiner asserted that claim 24 lacks antecedent bases for the recitations of “the potential difference” and “the signal conversion unit.” Claim 24 is amended by the instant amendment to recite “a potential difference” and “a signal conversion unit,” respectively.

In view of the above, applicants respectfully submit that claims 8 and 24 are not indefinite and respectfully request that this rejection be reconsidered and withdrawn.

F. Asserted Anticipation Rejection of Claims 1, 4, 6, 8, 10 and 53-59

In the outstanding Office action, the Examiner rejected claims 1, 4, 6, 8, 10 and 53-59 under 35 U.S.C. § 102(b) as being anticipated by the Hirschman reference. Applicants respectfully traverse this rejection, and respectfully submit that the Examiner failed to set forth a *prima facie* case of anticipation with respect to the rejected claims for at least the reasons set forth below.

Claim 1 recites, in part:

an electrode unit having a plurality of current supply electrodes for supplying a constant current . . .; and

a current source for supplying the constant current to the current supply electrodes.

In the outstanding Office action, the Examiner asserted that claim 1 is anticipated by the Hirschman reference. In particular, the Examiner asserted that the Hirschman reference discloses current supply electrodes (52a and 52d) and a current source (column 6, lines 60-61). *Office action of November 2, 2005, at paragraph 12, page 6.* However, the Hirschman reference does not disclose an electrode unit having a plurality of current supply electrodes for supplying a constant current, nor does it disclose a current source for supplying the constant current to the current supply electrodes, as recited in claim 1.

Rather, the Hirschman reference discloses, at most, electrodes and electronics for supplying a radiofrequency current, i.e., a high frequency *alternating current*. *See, e.g., the Hirschman reference at col. 6, lines 60-63, and col. 7, lines 49-55, wherein it is disclosed that “electrodes 52a-d and electrodes 54a-d are generally orthogonally disposed upon plethysmograph transducer 50 for applying RF electrical energy.”* Accordingly, applicants respectfully submit that the Hirschman reference fails to disclose, or even suggest, each and every element of claim 1, and that claim 1 is allowable over the Hirschman reference.

The remaining rejected claims, viz., claims 4, 6, 8, 10 and 53-59, depend, either directly or indirectly, from claim 1, and are believed to be similarly allowable. Therefore, applicants respectfully request that this rejection be reconsidered and withdrawn.

G. Asserted Anticipation Rejection of Claims 1 and 60

In the outstanding Office action, the Examiner rejected claims 1 and 60 under 35 U.S.C. § 102(e) as being anticipated by the Skladnev et al. reference. Applicants respectfully traverse this rejection, and respectfully submit that the Examiner failed to set forth a *prima facie* case of anticipation with respect to the rejected claims for at least the reasons set forth below.

In the outstanding Office action, the Examiner asserted that claim 1 is anticipated by the Skladnev et al. reference. In particular, the Examiner asserted that the Skladnev et al. reference discloses current supply electrodes (15) and a current source (127 in figure 5). *Office action of November 2, 2005, at paragraph 16, page 6.* However, the Skladnev et al. reference does not disclose an electrode unit having a plurality of current supply electrodes for supplying a constant current, nor does it disclose a current source for supplying the constant current to the current supply electrodes, as recited in claim 1.

Rather, the Skladnev et al. reference discloses, at most, electrodes and electronics for supplying an *alternating current*. *See, e.g., the Skladnev et al. reference at page 14, line 35 to page 15, line 1, wherein it is disclosed that “electrodes 110 and 113 are connected . . . to the programmed alternating current generator 127” (applicants note that electrodes 110 and 113 correspond to electrodes 15; see FIG. 1b, FIG. 4, page 14, lines 7-10 and lines 17-18).* Accordingly, applicants respectfully submit that the Skladnev et al. reference fails to disclose, or even suggest, each and every element of claim 1, and that claim 1 is allowable over the Skladnev et al. reference.

The remaining rejected claim, viz., claim 60, depends from claim 1, and is believed to be similarly allowable. Therefore, applicants respectfully request that this rejection be reconsidered and withdrawn.

H. Asserted Anticipation Rejection of Claims 1 and 15

In the outstanding Office action, the Examiner rejected claims 1 and 15 under 35 U.S.C. § 102(e) as being anticipated by the Fletcher et al. reference. Applicants respectfully traverse this rejection, and respectfully submit that the Examiner failed to set forth a *prima facie* case of anticipation with respect to the rejected claims for at least the reasons set forth below.

In the outstanding Office action, the Examiner asserted that claim 1 is anticipated by the Fletcher et al. reference. In particular, the Examiner asserted that the Fletcher et al. reference discloses current supply electrodes (the two left electrodes of figure 1) and a current source (I2). *Office action of November 2, 2005, at paragraph 20, page 7.* However, the Fletcher et al. reference does not disclose an electrode unit having a plurality of current supply electrodes for supplying a constant current, nor does it disclose a current source for supplying the constant current to the current supply electrodes, as recited in claim 1.

Rather, the Fletcher et al. reference discloses, at most, ring electrodes and an electrical generator that generate a high frequency output signal, i.e., an *alternating current*. *See, e.g., the Fletcher et al. reference at col. 3, lines 50-63, wherein it is disclosed that “[t]he system includes a source of high frequency electrical current I2. . . [t]he output from the high frequency electrical generator 12 is coupled to a pair of transmitting ring electrodes 14. . .”* Accordingly, applicants respectfully submit that the Fletcher et al. reference fails to disclose,

or even suggest, each and every element of claim 1, and that claim 1 is allowable over the Fletcher et al. reference.

The remaining rejected claim, viz., claim 15, depends from claim 1, and is believed to be similarly allowable. Therefore, applicants respectfully request that this rejection be reconsidered and withdrawn.

I. Asserted Anticipation Rejection of Claims 1 and 24

In the outstanding Office action, the Examiner rejected claims 1 and 24 under 35 U.S.C. § 102(e) as being anticipated by the Gallup et al. reference. Applicants respectfully traverse this rejection, and respectfully submit that the Examiner failed to set forth a *prima facie* case of anticipation with respect to the rejected claims for at least the reasons set forth below.

In the outstanding Office action, the Examiner asserted that claim 1 is anticipated by the Gallup et al. reference. In particular, the Examiner asserted that the Gallup et al. reference discloses an electrode unit (column 4, lines 7-22) having current supply electrodes and a current source (44). *Office action of November 2, 2005, at paragraph 23, page 7.* However, the Gallup et al. reference does not disclose an electrode unit having a plurality of current supply electrodes for supplying a constant current, nor does it disclose a current source for supplying the constant current to the current supply electrodes, as recited in claim 1.

Rather, the Gallup et al. reference discloses, at most, electrodes and electronics that supply a 50 kHz signal, i.e., an *alternating current*. *See, e.g., the Gallup et al. reference at col. 1, lines 48-53, wherein it is disclosed that "a source of substantially constant peak-to-peak alternating current is coupled to the reference network as well as to at least one of the body electrodes," and col. 8, lines 42-46, which disclose that "the output frequency of the*

*wave form on a line 90 is 50 khz and is used to generate the 50 khz signal applied to the respective body network, sense network and calibration networks” (applicants note that the 50 kHz signal is applied to the sense and body networks via body electrodes 106 - see col. 9, lines 14-27). Accordingly, applicants respectfully submit that the Gallup et al. reference fails to disclose, or even suggest, each and every element of claim 1, and that claim 1 is allowable over the Gallup et al. reference.*

The remaining rejected claim, viz., claim 24, depends from claim 1, and is believed to be similarly allowable. Therefore, applicants respectfully request that this rejection be reconsidered and withdrawn.

J. Asserted Obviousness Rejection of Claims 1, 3-6, 8, 10 and 53-59

In the outstanding Office action, the Examiner rejected claims 1, 3-6, 8, 10 and 53-59 under 35 U.S.C. § 103(a) as being unpatentable over the Hirschman reference in view of the Hagen et al. reference. Applicants respectfully traverse this rejection, and respectfully submit that the Examiner failed to set forth a *prima facie* case of obviousness with respect to the rejected claims for at least the reasons set forth below.

In the outstanding Office action, the Examiner relied on the Hirschman reference as anticipating claim 1. *Office action of November 2, 2005, at paragraph 27, page 8.* However, as discussed above, applicants respectfully submit that the Hirschman reference fails to disclose or suggest each and every element of claim 1. Further, applicants note that the Hagen et al. reference is directed to “an HF-surgery device,” i.e., a high-frequency, *alternating current* device. Accordingly, the Hagen et al. reference fails to provide the teachings missing from the Hirschman reference, viz., current supply electrodes for supplying a constant current, and a current source for supplying the constant current to the current

supply electrodes. Therefore, as the proposed combination of the Hirschman and Hagen et al. references fails to suggest, much less disclose, each and every element of claim 1, applicants respectfully submit that claim 1 is allowable over the cited prior art.

The remaining rejected claims, viz., claims 3-6, 8, 10 and 53-59, depend, either directly or indirectly, from claim 1, and are believed to be similarly allowable. Therefore, applicants respectfully request that this rejection be reconsidered and withdrawn.

K. Asserted Obviousness Rejection of Claims 1 and 17

In the outstanding Office action, the Examiner rejected claims 1 and 17 under 35 U.S.C. § 103(a) as being unpatentable over the Libke et al. reference in view of the Dufresne et al. reference. Applicants respectfully traverse this rejection, and respectfully submit that the Examiner failed to set forth a *prima facie* case of obviousness with respect to the rejected claims for at least the reasons set forth below.

In the outstanding Office action, the Examiner asserted that the Libke et al. reference discloses an electrode unit having current supply electrodes (12 and 16) and a current source. *Office action of November 2, 2005, at paragraph 32, page 9.* However, the Libke et al. reference does not disclose an electrode unit having a plurality of current supply electrodes for supplying a constant current, nor does it disclose a current source for supplying the constant current to the current supply electrodes, as recited in claim 1.

Rather, the Libke et al. reference discloses, at most, electrodes coupled to frequency generator generating a 40-60 kHz current, i.e., an *alternating current*. *See, e.g., the Libke et al. reference at col. 3, lines 65-68, wherein it is disclosed that the system includes "means for generating a current flow through said electrode sensors at a frequency of from about 40 Kilohertz to about 60 Kilohertz."* Accordingly, applicants respectfully submit that the

proposed combination of the Libke et al. and Dufresne et al. references fails to suggest, much less disclose, each and every element of claim 1 and, therefore, applicants respectfully submit that claim 1 is allowable over the cited prior art.

The remaining rejected claim, viz., claim 17, depends from claim 1, and is believed to be similarly allowable. Therefore, applicants respectfully request that this rejection be reconsidered and withdrawn.

L. Asserted Obviousness Rejection of Claims 1, 19 and 60

In the outstanding Office action, the Examiner rejected claims 1, 19 and 60 under 35 U.S.C. § 103(a) as being unpatentable over the Mee et al. reference in view of the Skladnev et al. reference. Applicants respectfully traverse this rejection, and respectfully submit that the Examiner failed to set forth a *prima facie* case of obviousness with respect to the rejected claims for at least the reasons set forth below.

In the outstanding Office action, the Examiner asserted that the Mee et al. reference discloses measurement electrodes (2), while relying on the Skladnev et al. reference for the disclosure of current supply electrodes (13 in figure 4) connected to a current source (127 in figure 5). However, as discussed above, applicants respectfully submit that the Skladnev et al. reference fails to disclose or suggest these elements, as discussed above. Therefore, the proposed combination of the Mee et al. and Skladnev et al. references fails to disclose, or even suggest, each and every element of claim 1 and, accordingly, applicants respectfully submit that claim 1 is allowable over the cited prior art.

The remaining rejected claims, viz., claims 19 and 60, depend, either directly or indirectly, from claim 1, and are believed to be similarly allowable. Therefore, applicants respectfully request that this rejection be reconsidered and withdrawn.

M. Allowable Subject Matter

In the outstanding Office action, the Examiner indicated that claims 12-14 recite allowable subject matter, but objected to claims 12-14 as being dependent upon a rejected base claim.

Applicants appreciate the Examiner's indication of allowable subject matter in claims 12-14. However, applicants respectfully submit that all of the pending claims are allowable.

N. Conclusion

The remaining documents cited by the Examiner were not relied on to reject the claims. Therefore, no comments concerning these documents are considered necessary at this time.

Since the cited prior art relied on to reject the claims of the subject application fails to anticipate or render obvious the present invention, applicants respectfully submit that claims 1, 3-6, 8, 10, 12-15, 17, 19, 24 and 53-60 are in condition for allowance, and a notice to that effect is respectfully requested. In addition, applicants respectfully request re-entry of withdrawn claims 2, 7, 9, 11, 16, 28-45, 50, 51 and 61-67, which are believed to be allowable for at least the reasons set forth above.

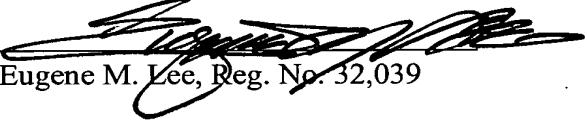
If the Examiner believes that additional discussions or information might advance the prosecution of the instant application, the Examiner is invited to contact the undersigned at the telephone number listed below to expedite resolution of any outstanding issues.

In view of the foregoing amendments and remarks, reconsideration of this application is earnestly solicited, and an early and favorable further action upon all the claims is hereby requested.

Respectfully submitted,

LEE & MORSE, P.C.

Date: March 2, 2006

  
Eugene M. Lee, Reg. No. 32,039

Attachments:

Four substitute drawing sheets  
One new drawing sheet

**LEE & MORSE, P.C.**  
1101 WILSON BOULEVARD, SUITE 2000  
ARLINGTON, VA 22209  
703.525.0978 TEL  
703.525.4265 FAX

**PETITION and**  
**DEPOSIT ACCOUNT CHARGE AUTHORIZATION**

This document and any concurrently filed papers are believed to be timely. Should any extension of the term be required, applicant hereby petitions the Director for such extension and requests that any applicable petition fee be charged to Deposit Account No. 50-1645.

If fee payment is enclosed, this amount is believed to be correct. However, the Director is hereby authorized to charge any deficiency or credit any overpayment to Deposit Account No. 50-1645.

Any additional fee(s) necessary to effect the proper and timely filing of the accompanying-papers may also be charged to Deposit Account No. 50-1645.